The Wildlife Habitat Education Program: Moving from Contest Participation to Implementation

Abstract
Do members participating in the Wildlife Habitat Education Program (WHEP) apply knowledge gained by implementing wildlife management practices at the local level? 4-H members who participated in the National WHEP Contest from 2003 - 2005 and 2007 - 2011 completed an evaluation at the end of each contest. The evaluation asked participants if they implemented wildlife management practices. Results suggest that participation in WHEP has a positive influence on the implementation of wildlife management practices at the local level.

Introduction
The 4-H Wildlife Habitat Education Program (WHEP) is designed to teach youth the fundamentals of wildlife science and appropriate management practices. Beginning as the Wildlife Judging program in Tennessee, WHEP has become the largest and most visible 4-H wildlife programs in the United States (WHEP, 2010).

The National WHEP contest, open to senior 4-H members, consists of five events that focus on wildlife identification, wildlife knowledge, management practices, a written wildlife management plan, and an oral defense of their plan (WHEP, 2010).

Participants gain knowledge in natural resource management through an educational manual (www.whep.org) and involvement in contests and associated educational programs conducted by coaches at the local level. While the manual and activities focus on developing content knowledge in wildlife management, the program structure helps participants develop important life skills (Allen & Elmore, 2011). Others have noted that youth education is enhanced through educational efforts that provide context to content through hands-on learning projects (Bourdeau, 2004; Skelton & Dormody, 2009).
Dewey (1938) stated that "..all principles, by themselves are abstract and become concrete only in the consequences which result from their application." For true learning and understanding to occur, a sequence of three discrete components is needed: 1) A "concrete experience" (Enfield, 2001; Kolb, 1984) where the learner is involved in performing an activity; 2) a "reflection" stage (Joplin, 1981; Kolb, 1984; Pfeiffer & Jones, 1981) where the learner shares observations and processes the experience through discussion and analysis; and 3) an "application" phase that helps the learner deepen their understanding of a concept by cementing their experience through generalizations and applications (Carlson & Maxa, 1998).

The National WHEP Contest addresses components 1 and 2 as youth must use knowledge gained regarding management of habitat and wildlife populations and apply this knowledge as they participate in this event (Allen & Elmore, 2012). Members must then process their experience with team members as they prepare for an oral defense their wildlife plan.

For the study reported here, our objective was to evaluate whether WHEP also fulfills the third component of learning. That is, do WHEP participants apply the knowledge gained from the program to the broader world around them?

**Methodology**

The populations used in the study was 4-H members who participated in the National WHEP Contest from 2003 - 2005 and 2007 - 2011. Evaluations prior to 2003 and for 2006 were not available. During the time frame measured, 379 youth participated in the National WHEP Contest.

At the conclusion of each national contest, members complete a program evaluation to gather input relating to youth experiences in the WHEP. For the purpose of the study, we evaluated responses where youth are asked to indicate: 1) Due to participation in WHEP, have you implemented wildlife management practices? and 2) Have you taught wildlife management principles to others?

**Results**

One hundred twenty-nine (34%) participants indicated they have implemented wildlife management practices on a total of 59,344 acres (460 acres per participant on average). One hundred eighty-two (48%) of the participants had taught 4,004 individuals (22 individuals per participant on average) about wildlife management.

Examples of wildlife management practices implemented:

- "Helped a neighbor increase butterfly and hummingbird habitat."
- "Built, set and maintained nest boxes for bluebirds and wood ducks on a 350 acre farm."
- "Worked at National Wildlife Refuge to increase plant diversity on 800 acres using prescribed burning."
- "Created Eastern Cottontail Habitat at a local park using a $300 city grant."
• "Worked with neighbor to implement appropriate management properties on their 1,200 acre farm to increase habitat diversity."

• "Our WHEP group was asked to develop and manage a native plant area in our local park. This involved preparing area, securing plants and developing signage."

• "Worked with local land owner to develop a deer and quail management plan on their 900 acre farm."

Examples of teaching opportunities:

• "Various presentations have been made for Farm Bureau, Rotary, and other community organizations."

• "I taught wildlife management principles to 300 4-H campers."

• "Presented "Food Plots vs Habitat Management" to our local National Wild Turkey Federation chapter."

• "Presented "The Science of Wildlife Management" for biology classes at high school."

• "As a result of a presentation our team made to our local Soil and Water Conservation District, we have been asked to have one of our team members serve on the board."

**Lessons Learned and Recommendations**

Evidence of participant application of knowledge has been accomplished through opportunities where 34% of the participants have implemented wildlife management practices on nearly 60,000 acres and 48% have taught wildlife management principles to over 4,000 individuals.

A limitation of the study is that evaluation results were only received from members who participated in the National WHEP Contest. Future research is needed to determine how all WHEP participants apply knowledge of wildlife management practices at the local level and collect more detailed information of the practices implemented and the acres affected. Additional research is also needed to determine if wildlife management knowledge gained was solely based on WHEP participation or if other factors had previously influenced participants and involvement in the WHEP built on a pre-existing interest.

WHEP is the only national program available that teaches wildlife and fisheries management with a scientifically based curriculum created and managed by wildlife and youth professionals. Nearly 10,000 4-H youth participate in WHEP annually, and numbers continue to grow, with each member taking the knowledge learned back to their farm, forest, or residential lot (WHEP, 2010). As members gain wildlife management knowledge and use this information in a meaningful experience, members learn "to make a difference" with what they have learned. As Extension educators, we must ensure that youth are provided opportunities to apply what they have learned from involvement in their 4-H project. It is this application of knowledge gained that brings 4-H programs full circle in the
education cycle (Carlson & Maxa, 1998).

References


